

Applicants have discovered that if sunflower or safflower oil is utilized, the resulting phosphatidyl and sterol residues are low enough for the material to be characterized as food grade. In particular, Applicants first provide the sunflower or safflower oil as delivered by tanker, subject it to fat splitting and esterification, and then proceed directly with the unrefined esterification product into isomerization. The usual purification and refining steps are not necessary. This material can be made in commercial scale quantities at a low enough cost to be practical as a feed or food supplement.

IN THE CLAIMS:

Please substitute the following amended claims for the original pending claims of the same numbers; the amended claims are rewritten in clean form, in accordance with 37 CFR 1.121(c)(1)(i).

Sulf 13

3. (Amended once) The animal feed of claim 1 wherein said conjugated linoleic acid alkyl ester is comprised of at least 50 percent up to about 99 percent by weight of octadecanoic acid alkyl ester isomers selected from the group consisting of c9,t11-octadecanoic acid alkyl ester and t10,c12-octadecanoic acid alkyl ester, with less than about two percent of 11,13-octadecanoic acid alkyl ester.

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4. (Amended twice) A conjugated linoleic acid alkyl ester composition for safe use as a feed, food ingredient, or food supplement obtained by direct isomerization of an unrefined linoleic acid comprising

a composition of isomers in one part comprising at least 50 percent by weight of ester isomers selected from the group consisting of c9,t11-octadecadienoic acid alkyl ester and t10,c12-octadecadienoic acid alkyl ester, and combinations thereof, and

in a second part comprising less than two percent by aggregate weight of ester isomers selected from the group consisting of 8,10-octadecadienoic acid alkyl esters, 11,13-octadecadienoic acid alkyl esters, and trans,trans-octadecadienoic acid alkyl esters, and

in a third part comprising in the range of 0.1 to 0.5 percent phosphatidyl residue remaining after isomerization of said unrefined linoleic acid.

7. (Amended once) A conjugated linoleic acid alkyl ester composition for use in domestic animal feed, food ingredients, or human dietary supplements made by the process comprising

providing an unrefined linoleic acid alkyl ester having phosphatidyl residue in the range of about 0.1 to about 0.5 percent

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~~treating with an alkali alcoholate at low temperature in the presence of a monohydric low molecular weight alcohol to cause isomerization of at least 50 percent of the linoleic acid alkyl ester to conjugated linoleic alkyl ester at low temperature, ? see page 6 line 27~~

acidifying by addition of an aqueous acid, and

separating the linoleic conjugated linoleic acid alkyl ester from said aqueous acid without distillation.

low temperature

about 90-145°C